CLAIMS

We claim:

1. A method for compensating for drift in macroblocks of a partially decoded input bitstream, the macroblocks including intra-mode and inter-mode macroblocks, and each macroblock including DCT coefficients, and a motion vector, comprising:

measuring an estimate of drift in the partially decoded input bitstream;

translating the estimated of drift into an intra refresh rate;

mapping the modes of inter-mode macroblock to inter-mode macroblock according to the refresh rate; and

modifying the DCT coefficients and the motion vector for each changed macroblock in accordance with the mapping for each changed macroblock to compensate for drift.

2. The method of claim 1 further comprising:

generating a difference signal from the DCT coefficients before and after quantizing; and

measuring an energy of a difference signal to determine the estimate of the drift.

3. The method of claim 1 further comprising:

generating a full-resolution drift compensating signal for each down-sampled macroblock; and

measuring an energy of the full-resolution drift compensation signal to determine the estimate of the drift.

4. The method of claim 1 further comprising:

measuring an error in truncated motion vectors.

5. The method of claim 1 further comprising:

generating a full-resolution drift compensating signal for each down-sampled macroblock;

measuring an energy of the full-resolution drift compensation signal to determine the estimate of the drift; and

measuring an error in truncated motion vectors.

6. The method of claim 1 further comprising:

translating according to a predetermined threshold.

7. The method of claim 1 where in the translating is proportional to the estimate of drift.

8. The method of claim 1 where in the translating depends on rate-distortion characteristics of the macroblocks.

9. An apparatus method for compensating for drift in macroblocks of a partially decoded input bitstream, the macroblocks including intra-mode and inter-mode

macroblocks, and each macroblock including DCT coefficients, and a motion vector, comprising:

means for measuring an estimate of drift in the partially decoded input bitstream;

means for translating the estimated of drift into an intra refresh rate;

means for mapping the modes of inter-mode macroblock to inter-mode macroblock according to the refresh rate; and

means for modifying the DCT coefficients and the motion vector for each changed macroblock in accordance with the mapping for each changed macroblock to compensate for drift.